Appendix A: The Claims

In response to the Office Action dated May 12, 1999 ("First Office Action"), Applicants' representative canceled claims 1 and 2; amended 3-13; and added new claims 24-42. Accordingly claims 3-14 and 24-42 are currently pending.

Independent Claims 24 and 25

Claim 24 reads:

A coated nanocrystal capable of light emission, comprising:

a core comprising a first semiconductor material, said core being a member of a **monodisperse particle population**; and

an overcoating uniformly deposited on the core comprising a second semiconductor material,

wherein the first semiconductor material and the second semiconductor material are the same or different, and wherein the **monodisperse particle population** is characterized in that when irradiated the population **emits light** in a spectral range of no greater than **about 60 nm** full width at half max (FWHM).

Claim 25 reads:

A coated nanocrystal capable of light emission, comprising:

a core comprising a first semiconductor material, said core being a member of a **monodisperse particle population**; and

an overcoating uniformly deposited on the core comprising a second semiconductor material,

wherein the first semiconductor material and the second semiconductor material are the same or different, and wherein the **monodisperse particle population** is characterized in that it **exhibits** no more than about a **10% rms** deviation in the diameter of the core.

Dependent Features:

Certain dependent claims are limited to the FWHM of the core's monodisperse particle population to 40 nm and 30 nm. See claims 3 and 4. Other claims are limited to the rms deviation in the diameter of the monodisperse particle population core to no more than about 5% rms. See claims 7 and 32. Claims 5 and 6 recite a specific increase in the photoluminescence quantum yields of the coated nanocrystals.